PTO-1542
(4-85)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

8-22

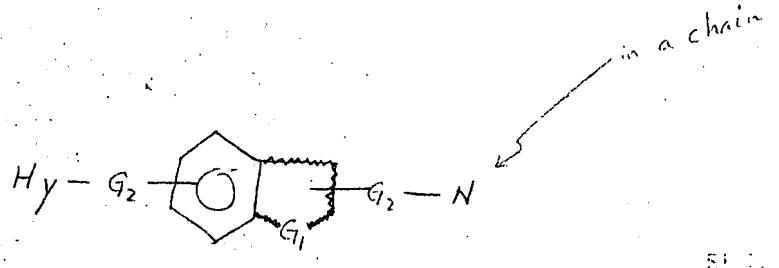
ONLINE SEARCH REQUEST FORM

USER CHANG SERIAL NUMBER 07/827,187

ART UNIT 1005 PHONE 308-4702 DATE 8/3/92

Please give a detailed statement of requirements. Describe as specifically as possible the subject matter to be searched. Define any terms that may have special meaning. Give examples or relevant citations, authors, or keywords, if known.

You may include a copy of the broadest and or relevant claim(s).



H_y = HIQ, MCY

G_1 = O/S/N

G_2 = (O-3)CH

100
31
15

STAFF USE ONLY

COMPLETED 8/4/92
SEARCHER Kathleen Fuller 308-9240
ONLINE TIME ____ (in minutes) TOTAL TIME 21
NO. OF DATABASES 1

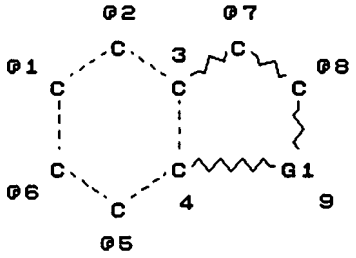
SYSTEMS
CAS ONLINE
DARC/QUESTEL
DIALOG
SDC
OTHER

Chang
827187

```
=> file reg
FILE 'REGISTRY' ENTERED AT 13:22:05 ON 04 AUG 92
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 1992 AMERICAN CHEMICAL SOCIETY (ACS)

STRUCTURE FILE UPDATES:  31 JUL 92   HIGHEST RN 142757-69-5
DICTIONARY FILE UPDATES:  3 AUG 92   HIGHEST RN 142757-69-5

=> d que l6
L1                STR
```




```
Hy—G2—C
10  11  @12

Hy @13    G3 @14    G5 @15    N @19

 C—G2—N
@16 17  18

VAR G1=O/S/N
REP G2=(0-2) CH
VAR G3=13/12
VAR G5=19/16
VPA 14-1/2/5/6 U
VPA 15-7/8 U
NODE ATTRIBUTES:
NSPEC    IS C      AT  18
NSPEC    IS C      AT  19
GGCAT    IS MCY    AT  10
GGCAT    IS HIC    AT  10
GGCAT    IS MCY    AT  13
GGCAT    IS HIC    AT  13

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  19
L2              SCR 1995 AND 1840
L3              SCR 52 OR 72
L4              SCR 1841
L6           0 SEA SSS FUL L1 AND L2 AND L3 NOT L4

=> file home
FILE 'HOME' ENTERED AT 13:23:23 ON 04 AUG 92
```

1-3

G3 = 14 = 13 or 12

G5 = 15 = 19 or 16

4 N's

= 3 rings

or or

= 4 rings

ok batch request

cc 827187B

=> log y
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.70	34.15
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.38	-0.38

STN INTERNATIONAL LOGOFF AT 08:25:40 ON 13 AUG 92

customer pad #107
SERVICE:
COM

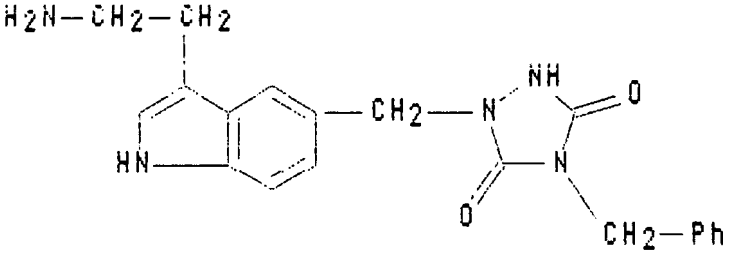
Your question
EP P 313397
Family members

CC	PUBDAT	KD	DOC.NO.	CC	PR.DAT	AKP	YY	PR. NO.
AU	890427	A1	24181/88	GB	871023	PA	87	8724912
AU	901206	B2	604165					
CN	890830	A	1035113					
DD	901003	A5	283140					
DK	881021	AO	5865/88					
DK	890424	A	5865/88					
EP	890426	A1	313397					
	DES AT BE CH DE ES FR GB GR IT LI LU NL SE							
FI	881021	AO	884879					
FI	890424	A	884879					
GB	871125	AO	8724912					
HU	891228	A2	50163					
HU	910228	B	202230					
IL	890630	AO	88122					
JP	890608	A2	1146882					
MC	891123	A	1983					
NZ	910925	A	226671					
PL	890807	A1	275423					

Please turn over to next page

ZA	900627	A	8807900

18 MEMBERS 14 COUNTRIES
Your input please
V



0 REFERENCES IN FILE CA (1967 TO DATE)

=> fil ca
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	32.30	32.45

FILE 'CA' ENTERED AT 08:25:02 ON 13 AUG 92
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

FILE COVERS 1967 - 8 Aug 92 (920808/ED) VOL 117 ISS 06.
For OFFLINE Prints or Displays, use the ABS or ALL formats to obtain abstract graphic structures. The AB format DOES NOT display structure diagrams.

=> s l5
L6 1 L5

=> d bib ab

L6 ANSWER 1 OF 1 COPYRIGHT 1992 ACS
AN CA111(25):232814g
TI Preparation and formulation of heterocyclic compounds for use as therapeutic agents particularly in treatment of migraine
AU Robertson, Alan Duncan; Martin, Graeme Richard; Buckingham, Janet Susan
CS Wellcome Foundation Ltd.
LO UK
SO Eur. Pat. Appl., 37 pp.
PI EP 313397 A1 26 Apr 1989
DS R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 88-309943 21 Oct 1988
PRAI GB 87-24912 23 Oct 1987
IC ICM C07D403-06
ICS C07D413-06; C07D405-14; C07D409-14; A61K031-40; A61K031-41; A61K031-415; A61K031-42
SC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
SX 1, 63
DT P
CO EPXXDW
PY 1989
LA Eng
AB Title compds. I (R, R1, R2 = H, C1-4 alkyl; R3, R4 = H, (un)substituted C1-6 alkyl, C1-6 cycloalkyl, (un)substituted C1-6 aryl, (un)substituted PhCH2, provided R3 .noteq. (un)substituted PhCH2 where R4 = H; W = heterocycly; X = (un)substituted aryl, heteroaryl, xanthenyl, or dibenzofuranyl; m = 0-2; n = 0-3) salts and solvates thereof, are prepd. (-)-4'-[2-[4-(4-Nitrobenzyl)-2,5-dioxoimidazolidinyl]ethyl]acetanilide (prepn. given) was added to HCHO in MeOH, NaBA3CN and AcOH in MeOH, the mixt. was stirred for 2.5 h, satd. aq. K2CO3 was added to give (-)-I [X(CH2)nW(CH2)m = [2-[5-[1-[2-(4-acetamidophenyl)ethyl]-2,5-dioxoimidazolidin-4-ylmethyl]; R, R1, R2 = H; R3, R4 = Me]. Similarly prepd. was (.+-.)-2-[5-(1-benzyl-3-methyl-2-oxoimidazolidin-4-ylmethyl-1H-indol-3-yl]ethylamine maleate (II). In test for activity as agonist of 5-HT1-like receptor mediating smooth muscle contraction, II was the most active. Numerous formulations contg. I are presented.

```
=> search
ENTER LOGIC EXPRESSION, QUERY NAME, OR (END):13
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:sss
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:subset
ENTER SUBSET L# OR (END):12
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):ful
FULL SUBSET SEARCH INITIATED    8:24:24
FULL SUBSET SCREEN SEARCH COMPLETED -      87 TO ITERATE
100.0% PROCESSED       87 ITERATIONS                        2 ANSWERS
SEARCH TIME: 00.00.07

L5             2 SEA SUB=L2 SSS FUL L3

=> d 1-2 sub can

L5    ANSWER 1 OF 2  COPYRIGHT 1992 ACS
RN    123945-16-4  REGISTRY
CN    1,2,4-Triazolidine-3,5-dione, 1-[[3-(2-aminoethyl)-1H-indol-5-
      yl]methyl]-4-(phenylmethyl)-, (Z)-2-butenedioate (9CI)  (CA INDEX
      NAME)
MF    C20 H21 N5 O2 . x C4 H4 O4
SR    CA
LC    CA

      CM   1

      CRN  123945-15-3
      CMF  C20 H21 N5 O2
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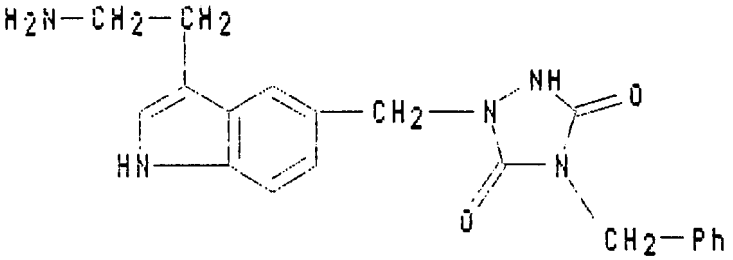

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      CM   2

      CRN  110-16-7
      CMF  C4 H4 O4
      CDES 2:Z
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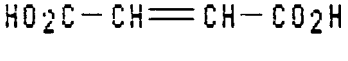

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  1 REFERENCES IN FILE CA (1967 TO DATE)

  REFERENCE   1:  P  CA111(25):232814g

L5    ANSWER 2 OF 2  COPYRIGHT 1992 ACS
RN    123945-15-3  REGISTRY
CN    1,2,4-Triazolidine-3,5-dione, 1-[[3-(2-aminoethyl)-1H-indol-5-
      yl]methyl]-4-(phenylmethyl)- (9CI)  (CA INDEX NAME)
FS    3D CONCORD
MF    C20 H21 N5 O2
CI    COM
SR    CA
```

=)' d l3 bib ab

L3 ANSWER 1 OF 1 COPYRIGHT 1992 ACS
AN CA75(11):76800e
TI Indole derivatives as nonnutritive sweetners
AU Kornfeld, Edmund C.
CS Lilly, Eli, and Co.
SO S. African, 32 pp.
PI ZA 6904486 24 Dec 1970
PRAI US 5 Jul 1968
SC 28 (Heterocyclic Compounds (More Than One Hetero Atom))
DT P
CO SFXXAB
PY 1970
LA Unavailable
AB 3-(Diethylaminomethyl)-6-chloroindole (8 g), 7.5 g ethyl .alpha.-acetamido-.alpha.-cyanoacetate, and 6.5 g powd. KOH in 35 ml toluene was refluxed for 1 hr under N to form ethyl

dl-N-acetyl-.alpha.-cyano-.alpha.-carbethoxy-6-chlorotryptamine (I). AlCl3 (2.8 g) in THF was added to a stirred suspension of 4.5 g NaN3 in THF the mixt. refluxed 1 hr and cooled to 25.degree., 6.94 g I added, and the mixt. refluxed 24 hr to form dl-N-acetyl-.alpha.-carbethoxy-.alpha.-5-tetrazolyl-6-chlorotryptamine (II). II (7.3 g) in NaOH was refluxed 3 hr, then decarboxylated by heating in H2O for 2 hr to form dl-N-acetyl-.alpha.-5-tetrazolyl-6-chlorotryptamine (III). III (2 g) was refluxed with 2 g NaOH in 25 ml H2O to give dl-.alpha.-5-tetrazolyl-6-chlorotryptamine. Two other compds. were similarly prepd.